

Gold-Working in Ancient America

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European observers of the fifteenth and sixteenth centuries were impressed by both the aesthetic sensitivity and the technical virtuosity of native American goldsmiths. By examining early Spanish descriptions in the light of modern scientific and technical knowledge, a surprisingly detailed picture of aboriginal gold technology can be built up.

The gold of America first came to European notice in 1492. In that year, Columbus' fleet explored the coasts of Cuba and Hispaniola and his sailors bartered Venetian glass beads, Spanish clothing, brass hawk bells and even bits of broken pottery for the golden ornaments of the natives. The West Indies were not particularly rich in precious metals but by 1530 all the major gold-producing regions of the New World from Mexico to Peru were in Spanish hands. Most of the gold jewellery was melted down on the spot but a few items were sent home as curios or as samples. The most typical reaction in Europe was astonishment at the sheer *quantity* of gold flowing into Spain from the new American colonies but those connoisseurs with a more discerning eye were even more amazed by the artistic *quality* of the pieces.

The artist Albrecht Dürer, himself the son of a goldsmith, examined part of the treasure of the Aztec emperor Montezuma when this was displayed at court in Brussels during 1520 and wrote in his notebook:

'I saw such things which were brought to the King from the New Golden Land; a sun entirely of gold, a whole fathom broad; likewise a moon entirely of silver, just as large; likewise sundry curiosities from their weapons, arms and missiles... These things were all so precious that they were valued at 100 000 guilders. But I have never in all my days seen anything that so delighted my heart as these things. For I saw amazing objects and I marvelled at the subtle ingenuity of the men in these distant lands'.

Among the host of adventurers, scholars, priests and officials who came to the New World were some who had practical experience of metalworking. Girolamo Benzoni, whose 'History of the New World' appeared in 1565, was a Milanese silversmith and jeweller, while the historian Gonzalo Fernández de Oviedo served as the king's supervisor of smelting operations in *Tierra Firme* (the old Spanish Main) from 1514 to 1532. Even Sir Walter Raleigh, in his abortive search for the legendary 'Golden Citie of Manoa', collected important information about the melting and casting of gold alloys in Guyana (1).

By combining these early eyewitness accounts with modern laboratory analyses of museum specimens, it

A Major Exhibition of Early American Gold

To the native South American Indians gold was a plentiful and useful metal, not restricted to ornamental or ceremonial purposes but relied upon to make many articles for everyday use. The technical skills displayed in the fabrication of the few objects sent home by the Spanish Conquistadores in the early part of the sixteenth century astonished the artists and craftsmen of Europe, but the great majority of the gold objects were unfortunately and quickly consigned to the melting pot.

In more recent years great quantities of gold have been found in tombs in which for generations the Indians buried their dead and an immense collection of these objects has been assembled in the Museo del Oro in Bogotá. Now, a representative collection of these treasures — together with others from the British Museum and private sources — will be on view to the public in a major exhibition being mounted by the Royal Academy of Arts in London from November this year until the following March under the title 'The Gold of El Dorado'.

The exhibition will amply illustrate the high level of technology displayed by the Colombian Indians, the sources of their gold, their methods of extraction and refining, their techniques of working the metal and of gilding base metals. All the techniques used by the modern goldsmith, with the single exception of electroplating, had in fact been discovered and used by the Indians and the many exhibits will include examples from their major period of gold production from 400 A.D. until this vast gold culture was discovered by the Spaniards.

Dr. Warwick Bray, the author of the accompanying article, is the Academic Adviser to the exhibition.